

Notice of Allowability

Application No.

10/823,941

Examiner

Kaj K. Olsen

Applicant(s)

WOLF ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the interview of 6-5-2006.
2. ☒ The allowed claim(s) is/are 1-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20060608</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Klicpera on 6-5-2006 with follow up discussion on 6-8-2006.

The application has been amended as follows:

Claim 1. (currently amended) A self-condensing sensor assembly for monitoring pH:

An outer tubular member;

an inner tubular member, said outer tubular member co-linearly enclosing an inner tubular member;

an antimony sensor enclosed within said inner tubular member;

a reference element enclosed within said outer tubular member and located in a proximal position to said antimony sensor;

a wick material, said wick material having one side which partially surrounds and substantially engages a portion of said inner tubular member, said wick material extending from said antimony sensor to a proximal position whereby said wick material is substantially engaged to said reference element;

an ion conduction media entrained or retained within said wick material; and

said self-condensing sensor having the capability to establish an electrical connection via micro-droplets condensed ~~condense a patient's breath~~ across said antimony sensor and said reference element.

Claim 11. (currently amended) A self-condensing sensor assembly for monitoring pH:

an outer tubular member;

an inner tubular member, said outer tubular member coaxially enclosing an inner tubular member;

an antimony sensor enclosed within said inner tubular member and substantially engaged to said inner surface of said inner tubular member, said antimony sensor including an electrical communication which extends to a proximal terminal position;

a reference element enclosed within said outer tubular member and located proximal to said antimony sensor, said reference sensor element includes an electrical communication means which extends to the proximal terminal position;

a wick material, said wick material having one side which partially surrounds and substantially engages a portion of said inner tubular member, said wick material extending from said antimony sensor to a proximal position whereby said wick material is substantially engaged to said reference element;

an ion conduction media is entrained or retained within said wick material; and

said self-condensing sensor having the capability to establish an electrical connection via micro-droplets condensed ~~condense a patient's breath~~ across said antimony sensor and said reference element.

Claim 22. (currently amended) A self-condensing sensor assembly for monitoring pH:

an outer tubular member;

an inner tubular member, said outer tubular member coaxially enclosing an inner tubular member;

an antimony sensor enclosed within said inner tubular member;

a reference element enclosed within said outer tubular member and located in a proximal position to said antimony sensor;

a wick material, said wick material having one side which partially surrounds and substantially engages a portion of said inner tubular member, said wick material extending from said antimony sensor to a proximal position whereby said wick material is substantially engaged to said reference element;

an ion conduction media entrained or retained within said wick material; and

said self-condensing sensor having the capability to establish an electrical connection via micro-droplets condensed ~~condense a patient's breath~~ across said antimony sensor and said reference element.

Claim 23. (currently amended) A self-condensing sensor assembly for monitoring pH:

an outer tubular member;

an inner tubular member, said outer tubular member co-linearly or coaxially enclosing an inner tubular member;

an antimony sensor enclosed within said inner tubular member;

a reference element enclosed within said outer tubular member and located in a proximal position to said antimony sensor;

a wick material, said wick material having one side which partially surrounds and substantially engages a portion of said inner tubular member, said wick material extending from said antimony sensor to a proximal position whereby said wick material is substantially engaged to said reference element;

an ion conduction media entrained or retained within said wick material,

said wick material and said antimony sensor are positioned in close proximity at a terminal end of said outer tubular member, and

said sensor assembly being of a small mass and capable of rapidly changing temperature such that it functions to cool below the dew point and subsequently condenses humid gases in close proximity to said sensor to form a liquid across the sensing elements on said terminal end and

said self-condensing sensor having the capability to establish an electrical connection via micro-droplets condensed across said antimony sensor and said reference element.

Claim 24. (currently amended) A self-condensing sensor assembly for monitoring pH:

an outer tubular member;

an inner tubular member, said outer tubular member coaxially enclosing an inner tubular member;

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an antimony sensor enclosed within said outer tubular member and substantially engaged to said outer surface of said inner tubular member, said antimony sensor including an electrical communication which extends to a proximal terminal position;

a reference element enclosed within said inner tubular member and located proximal to said antimony sensor, said reference sensor element including an electrical communication which extends to the proximal terminal position;

a wick material, said wick material substantially enclosed within said inner tubular member, said wick material extending from said antimony sensor to a proximal position whereby said wick material is substantially engaged to said reference element;

an ion conduction media is entrained or retained within said wick material; and

said self-condensing sensor having the capability to establish an electrical connection via micro-droplets condensed ~~condense a patient's breath~~ across said antimony sensor and said reference element.

2. The following is an examiner's statement of reasons for allowance: The primary teaching Christner, as well as the other suggested teachings of Broadley and Brunt, all appear to show that the electrode in the inner tubular member should stick out some distance from the outer tubular member (see especially the figure from Brunt and fig. 2 from Broadley). If the antimony sensor of Kleinberg were substituted for the inner tubular member of any of these references, the end result would be a sensor that would not be capable of establishing electrical connection via condensed micro-droplets across the antimony sensor and the reference element, as is now

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claimed, due to the fact that the distance between the antimony surface and the reference element would be too great to be bridged by any condensed micro-droplets.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (571) 272-1344. The examiner can normally be reached on Monday through Thursday from 5:30 A.M. to 3:00 P.M. and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AU 1753
June 8, 2006


KAJ K. OLSEN
PRIMARY EXAMINER